

RUSS, AUGUST & KABAT

RUSS, AUGUST & KABAT  
 Marc A. Fenster, State Bar No. 181067  
 Email: mfenster@raklaw.com  
 Alexander C.D. Giza, State Bar No. 212327  
 Email: agiza@raklaw.com  
 Andrew D. Weiss, State Bar No. 232974  
 Email: aweiss@raklaw.com  
 12424 Wilshire Boulevard, 12<sup>th</sup> Floor  
 Los Angeles, California 90025  
 Telephone: (310) 826-7474  
 Facsimile: (310) 826-6991

Attorneys for Plaintiff  
 NEUROGRAFIX

K&L GATES LLP  
 David T. McDonald  
 Email: david.mcdonald@klgates.com  
 925 Fourth Avenue  
 Suite 2900  
 Seattle, WA 98104-1158  
 Telephone: (206) 623-7580  
 Facsimile: (206) 623-7022  
 Attorneys for Plaintiff  
 WASHINGTON RESEARCH FOUNDATION

**UNITED STATES DISTRICT COURT**

**CENTRAL DISTRICT OF CALIFORNIA – WESTERN DIVISION**

NEUROGRAFIX, a California  
 corporation; WASHINGTON  
 RESEARCH FOUNDATION, a not-for-  
 profit Washington corporation,

Plaintiffs,

vs.

SIEMENS MEDICAL SOLUTIONS  
 USA, INC., a Delaware corporation; and  
 SIEMENS AKTIENGESSELLSCHAFT, a  
 German Corporation,

Defendants.

Case No. 10-CV-1990 MRP (RZx)

[Assigned to The Honorable Mariana  
 R. Pfäelzer]

**PLAINTIFFS' OPPOSITION TO  
 SIEMENS' MOTION FOR  
 PARTIAL SUMMARY  
 JUDGMENT OF INVALIDITY  
 REGARDING CLAIMS 3-5, 36, 37,  
 39-44, 46, 47, 49, 50, 55, 56, 58, 59,  
 61, AND 62 IN U.S. PATENT NO.  
 5,560,360 IN LIGHT OF CLAIM  
 CONSTRUCTION ORDER**

First Amended Complaint Filed:  
 July 30, 2010

RUSS, AUGUST & KABAT

## TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	APPLICABLE LEGAL STANDARD: INVALIDITY MUST BE SHOWN BY CLEAR AND CONVINCING EVIDENCE .....	2
III.	DEFENDANTS’ MOTION FOR SUMMARY JUDGMENT MUST BE REJECTED BECAUSE DEFENDANTS HAVE FAILED OT ESTABLISH BY CLEAR AND CONVINCING EVIDENCE THAT HAJNAL ANTICIPATES CLAIMS 3, 4, AND 5 OF THE ‘360 PATENT .....	2
A	Defendants Have Failed To Satisfy Their Prima Facie Burden of Establishing That Claims 3, 4, and 5 of the ‘360 Paten Are Anticipated by Figure 5 of the Hajnal Article .....	2
B.	Figure 5 of the Hajnal Reference Does Not Meet The Requirements of Claim 3 .....	4
IV.	ASSERTED CLAIMS 55, 56, 58, 59, 61, AND 62.....	5
V.	ASSERTED CLAIMS 36, 37, 39-44, 47, AND 50 .....	5
VI.	CONCLUSION .....	5

RUSS, AUGUST & KABAT

# TABLE OF AUTHORITIES

<i>Callaway Golf v. Acushnet Co.</i> , 576 F.3d 1331 (Fed. Cir. 2009).....	3
<i>Dayco Prods., Inc. v. Total Containment, Inc.</i> , 329 F.3d 1358 (Fed. Cir. 2003).....	2
<i>Douglas Dynamics, LLC v. Buyers Products Co.</i> , 745 F. Supp. 2d 876 (Fed. Cir. 2010).....	2
<i>Retractable Techs., Inc. v. Becton</i> , No. 2010-1402, 2011 U.S. App. LEXIS 13925, (Fed. Cir. July 8, 2011).....	2
<i>Trintec Indus., Inc. v. Top-U.S.A. Corp.</i> , 295 F.3d 1292 (Fed. Cir. 2002).....	2

## STATUTES

35 U.S.C. § 282 .....	2
-----------------------	---

1 Plaintiffs NeuroGrafix and Washington Research Foundation ("WRF")  
2 (collectively, "NeuroGrafix") submit this response to Defendants' Motion for  
3 Partial Summary Judgment of Invalidity Regarding Claims 3-5, 36, 37, 39-44, 46,  
4 47, 49, 50, 55, 56, 58, 59, 61, and 62 in U.S. Patent No. 5,560,360 in Light of  
5 Claim Construction Order (the "Motion").

6 **I. INTRODUCTION.**

7 Defendants are not entitled to summary judgment that Claims 3, 4, and 5 of  
8 U.S. Patent No. 5,560,360 (the "'360 patent") are invalid for anticipation. First,  
9 Defendants have failed to provide any evidence, much less clear and convincing  
10 evidence, that the Hajnal reference discloses certain elements of Claim 3.  
11 Specifically, Defendants have not (and cannot) provide evidence that the Hajnal  
12 reference discloses claim element (d)[iii] – the requirement that "wherein said spin-  
13 spin relaxation coefficient is substantially longer than that of other surrounding  
14 tissue." '360 patent, col. 37:54-55. Accordingly, the Hajnal reference does not  
15 anticipate claims 3, 4, or 5 of the '360 patent, and Defendants' request for summary  
16 judgment that claims 3, 4, and 5 are invalid should be denied.

17 The patent is aimed at imaging nerves in the periphery. As explained in the  
18 patent and in the file history, this patent is not aimed at imaging nerves in the  
19 "brain, spinal cord, and spinal roots within the spinal canal." '360 patent, col. 1:27-  
20 28. Hajnal describes imaging the trigeminal nerve, which is a cranial nerve in the  
21 brain. Thus, it is not surprising that Hajnal, which was expressly distinguished  
22 during the prosecution history, does not disclose all of the elements of the claimed  
23 invention.

24 Defendants are also not entitled to summary judgment that claims 36, 37,  
25 39-44, 47, and 50 of the '360 patent are invalid for the reasons stated in  
26 NeuroGrafix's Motion for Reconsideration, filed concurrently herewith.

## II. APPLICABLE LEGAL STANDARD:

### INVALIDITY MUST BE SHOWN BY CLEAR AND CONVINCING EVIDENCE.

Pursuant to 35 U.S.C. § 282, "[e]ach claim of a patent shall be presumed valid." An accused infringer "seeking to invalidate a patent at summary judgment must submit such clear and convincing evidence of facts underlying invalidity that no reasonable jury could find otherwise." *Douglas Dynamics, LLC v. Buyers Products Co.*, 745 F. Supp. 2d 876, 878 (Fed. Cir. 2010). In order to show that a prior art reference anticipates, it must disclose every claim element of the asserted claims. *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368-69 (Fed. Cir. 2003). Anticipation is a question of fact. *Retractable Techs., Inc. v. Becton*, No. 2010-1402, 2011 U.S. App. LEXIS 13925, at \*31 (Fed. Cir. July 8, 2011). Accordingly, "a district court properly may grant summary judgment on this identity question *only* when the record discloses no genuine material factual issues." *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1294 (Fed. Cir. 2002) (emphasis added) (vacating the grant of summary judgment of anticipation).

## III. DEFENDANTS' MOTION FOR SUMMARY JUDGMENT MUST BE REJECTED BECAUSE DEFENDANTS HAVE FAILED TO ESTABLISH BY CLEAR AND CONVINCING EVIDENCE THAT HAJNAL ANTICIPATES CLAIMS 3, 4, AND 5 OF THE '360 PATENT.

Defendants' motion for summary judgment should be rejected for two reasons: (1) Defendants have failed to make out a *prima facie* case of anticipation; and (2) Figure 5 of Hajnal does not disclose all of the elements of claim 3.

### A. Defendants Have Failed to Satisfy Their *Prima Facie* Burden of Establishing That Claims 3, 4 and 5 of the '360 Patent Are Anticipated by Figure 5 of the Hajnal Article.

In order to prove that Figure 5 of the Hajnal article anticipates claims 3, 4 and 5 of the '360 patent, Defendants must show that every element of each claim is expressly or inherently disclosed in a single prior art reference. *Dayco Prods., Inc.*, 329 F.3d at 1368-69. Because Defendants have not shown that all of the

1 requirements of Claim 3 are taught by Figure 5 of the Hajnal reference, Defendants  
2 have failed to meet their burden here.<sup>1</sup>

3 Element 3(d)[iii] of the '360 patent requires that "[the] characteristic spin-  
4 spin relaxation coefficient [of the nerve] is **substantially longer** than that of other  
5 surrounding tissue." '360 patent at 37:54-56 (emphasis added). A person of  
6 ordinary skill in the art understands that the "characteristic spin-spin relationship  
7 coefficient" of a tissue refers to the T2 decay time of the tissue. BZ Decl. ¶ 8. To  
8 a person of ordinary skill in the art, this requirement means that the nerve must  
9 have a T2 decay time that is substantially longer than the tissue around it. '360  
10 patent at 2:40-49; Docket No. 103-4 at 14; BZ Decl. ¶ 8. Although a structure's T2  
11 decay time changes depending on the magnetic field strength, each structure shown  
12 on an MR image has its own characteristic T2 decay time. BZ Decl. ¶ 8, Exh. A.

13 This requirement – that the T2 decay time of nerve is longer than that of  
14 surrounding tissue is true in peripheral nerves that are surrounded by muscle. This  
15 requirement is not true for nerves in the brain, or those surrounded by cerebral  
16 spinal fluid. Thus, Claim 3 explicitly applies only to methods applied where this  
17 condition – that the T2 decay time of nerve is substantially longer than the  
18 surrounding tissue – is met (i.e., not in the brain, spinal cord, or spinal roots within  
19 the spinal canal).

20 Defendants present no evidence or argument as to how the Hajnal reference  
21 discloses an MR image showing a nerve that has a characteristic T2 decay time  
22 that is substantially longer than the surrounding tissue. Rather, Defendants only  
23 show that Figure 5 of the Hajnal reference may have been generated using a pulse  
24 sequence where the signal intensity is influenced by T2 weighting. D.I. 119 at 11-  
25

26 <sup>1</sup> Dependent Claims 4 and 5 contain all the limitations of independent Claim 3 and  
27 a further limitation. Accordingly, dependent Claims 4 and 5 cannot be invalid  
28 because of anticipation unless Claim 3 is also invalid, which it is not. *See Callaway*  
*Golf v. Acushnet Co.*, 576 F.3d 1331, 1333 (Fed. Cir. 2009) ("A broader  
independent claim cannot be nonobvious where a dependent claim stemming from  
that independent claim is invalid for obviousness.").

12. In fact, as discussed below, Figure 5 in the Hajnal reference shows a structure with higher signal intensity despite a substantially shorter T2 time than the surrounding tissue (*i.e.*, cerebrospinal fluid).

Further, Defendants' citation to NeuroGrafix's infringement contentions as support for its argument fails. Contrary to the implication of Defendants' argument, NeuroGrafix's infringement contentions expressly disclose how the Accused Instrumentalities practice claim element 3(d)[iii]: "For example, a spin-spin relaxation coefficient of the imaged nerves that is substantially longer than that of other surrounding tissue was exploited to prepare the [Siemens] Trio image." Weiss Decl. ¶ 2, Ex. 1.

Accordingly, Defendants' request for summary judgment must be rejected because they have failed to meet their *prima facie* that claim element 3(d)[iii] is disclosed by Figure 5 of the Hajnal reference.

**B. Figure 5 of the Hajnal Reference Does Not Meet the Requirements of Claim 3.**

The Hajnal reference is not anticipatory prior art. Even assuming that Figure 5 of the Hajnal reference discloses the trigeminal nerve as Defendants argue, the trigeminal nerve has a T2 decay time that is *substantially shorter*, not substantially longer, than the surrounding tissue.

The structure identified in Figure 5 of the Hajnal reference is located inside the skull and is therefore surrounded by cerebral spinal fluid ("CSF"). BZ Decl. ¶ 9. Although T2 decay time varies dependent on field strength, the T2 decay time is measurable for a given field strength. BZ Decl. ¶ 8, Exh. A. However, regardless of field strength, the characteristic T2 decay time of the trigeminal nerve is not substantially longer than that of surrounding tissue. BZ Decl. ¶ 10. For example, at a field strength of 0.35 tesla, the T2 decay time for the surrounding cerebral spinal fluid is 166.3 ms. BZ Decl. ¶ 10, Exh. A. Even if Defendants argue that CSF should be discounted, at the same field strength, the T2 decay time of the trigeminal nerve is similar to – not substantially longer than – surrounding



1 white and grey brain matter, which ranges from 56.8 ms to 59.8 ms. *Id.* The only  
 2 reason the surrounding CSF appears black, and the nerve appears brighter, in  
 3 Figure 5 is because Hajnal et al. used diffusion weighted sequences, which make  
 4 essentially pure water collections like spinal fluid look black (diffusion weighted  
 5 sequences are designed to show increased signal from tissue where microscopic  
 6 water motion is restricted by membranes or other boundaries). BZ Decl. ¶ 10.

7 Thus, Figure 5 of the Hajnal reference does not teach the elements of Claim  
 8 3. BZ Decl. ¶ 11. At best, whether Figure 5 discloses the requirements of Claim 3  
 9 is a material question of fact. Defendants Motion should therefore be denied.

#### 10 **IV. ASSERTED CLAIMS 55, 56, 58, 59, 61, AND 62**

11 While reserving all of its applicable rights, including the right to appeal,  
 12 NeuroGrafix confirms that it does not oppose partial summary judgment of  
 13 invalidity for asserted Claims 55, 56, 58, 59, 61, and 62.

#### 14 **V. ASSERTED CLAIMS 36, 37, 39-44, 47, AND 50**

15 NeuroGrafix's position regarding Claims 36, 37, 39-44, 47, and 50 is  
 16 explained in its Motion for Reconsideration (Docket No. \_\_), filed concurrently  
 17 herewith]. For the reasons stated in NeuroGrafix's Motion for Reconsideration,  
 18 Claims 36, 37, 39-44, 47, and 50 are not invalid for obviousness.

#### 19 **VI. CONCLUSION**

20 For all the reasons articulated above, the Court should deny Siemens' motion  
 21 for partial summary judgment with respect to Claims 3-5, 36, 37, 39-44, and 50 of  
 22 the '360 patent.

23 Dated: August 8, 2011

Respectfully submitted,

**RUSS, AUGUST & KABAT**

26 By: /s/ Andrew D. Weiss  
 Andrew D. Weiss

**Attorneys for Plaintiff**  
**NEUROGRAFIX**



**K&L GATES**

By: /s/ David T. McDonald (by permission)  
David T. McDonald

**Attorneys for Plaintiff**  
**WASHINGTON RESEARCH FOUNDATION**

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on August 8, 2011. Any other counsel of record will be served via First Class U.S. Mail on this same date.

By: /s/ Andrew D. Weiss  
Andrew D. Weiss

RUSS, AUGUST & KABAT